

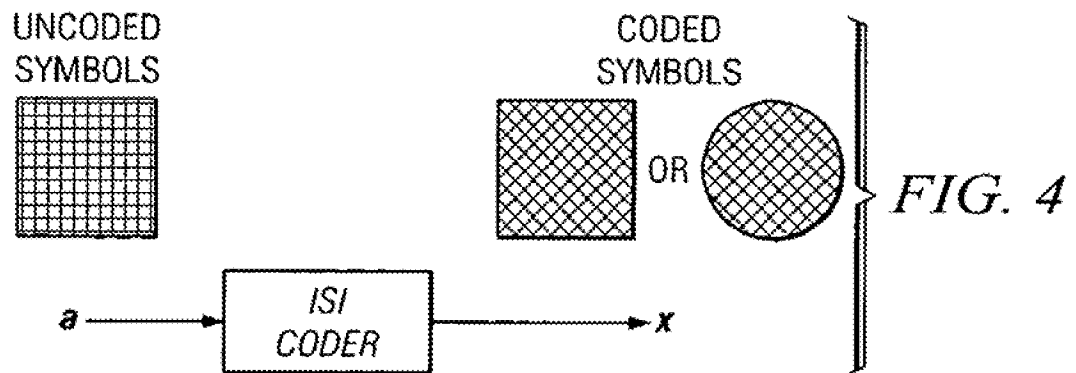
REMARKS/ARGUMENT

Claims 1-3, 5, 7, and 9 are pending in the instant application. No claims have been added nor cancelled. Therefore, upon entry of the present amendment, claims 1-3, 5, 7, and 9 will remain pending.

Drawings

The drawings were objected to under 37 CFR §1.83(b). The Examiner alleges that they are incomplete. Applicant traverses this objection.

FIG. 4 is a graphic representation showing a “Cartesian lattice” a grid, if you will, of the uncoded symbols. The figure represents the transform from the conventional grid or Cartesian lattice to a skewed lattice of a higher dimensional structure such as a multidimensional cube or sphere as examples.



Claims Rejections – 35 USC §112

Claims 1-3, 5, 7, and 9 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. The Examiner alleges that the symbol grid as described in claims 1-3, 5, 7, 9 is not properly described and that a grid is generally thought of as being in two dimensions. Applicant has amended

claims to change the term "Grid" to "lattice". Lattice does not have the same implication that the term grid has as grids are low-dimensional space representations of possible higher dimensional representations. A Cartesian lattice as known in the art is a square grid. The input symbols may be from an M-PAM constellation— $\{-(M-1), \dots, -3, 1, 3, \dots, (M-1)\}$ as an example—or from an M^2 -QAM constellation. Conventional QAM constellations consist of points in a square grid, but there are non-square grids in the art.

In light of the above, it is respectfully submitted that the present application is in condition for allowance, and notice to that effect is respectfully requested.

While it is believed that the instant response places the application in condition for allowance, should the Examiner have any further comments or suggestions, it is respectfully requested that the Examiner contact the undersigned in order to expeditiously resolve any outstanding issues.

Respectfully submitted:

/Steven A. Shaw/

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Date

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